

STEPHANIE M. HINDS (CABN 154284)
Acting United States Attorney

HALLIE HOFFMAN (CABN 210020)
Chief, Criminal Division

LAURA VARTAIN HORN (CABN 258485)
NICHOLAS WALSH (CABN 314290)
Assistant United States Attorneys

450 Golden Gate Avenue, Box 36055
San Francisco, California 94102-3495
Telephone: (415) 436-7200
Laura.Vartain@usdoj.gov
Nicholas.Walsh@usdoj.gov

NICHOLAS O. HUNTER (DCBN 1022355)
STEPHEN MARZEN (NYBN 2007094)
Trial Attorneys, National Security Division

950 Pennsylvania Ave., NW
Washington, DC 20530
Tel: (202) 353-3434
Fax: (202) 233-2146
Nicholas.Hunter@usdoj.gov
Stephen.Marzen@usdoj.gov

Attorneys for United States of America

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN FRANCISCO DIVISION

UNITED STATES OF AMERICA,)	CASE NO. 18-CR-00465 MMC
)	
Plaintiff,)	UNITED STATES' <i>DAUBERT</i> MOTION TO
)	EXCLUDE CERTAIN PROPOSED TESTIMONY
v.)	FROM DEFENDANT'S DRAM EXPERT
FUJIAN JINHUA INTEGRATED CIRCUIT)	
CO., LTD.,)	
)	
Defendants.)	
)	

UNITED STATES' DAUBERT MOT. TO EXCLUDE
CERTAIN TESTIMONY FROM DEF.'S DRAM EXPERT
18-CR-00465 MMC

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INTRODUCTION

Fujian Jinhua Integrated Circuit Co., Ltd (“Jinhua”) noticed the purported expert testimony of Dr. Woodward Yang, primarily as a supposed expert on process technology for Dynamic Random Access Memory (“DRAM”). The United States does not here seek to exclude Dr. Yang’s technical opinions about DRAM.

Jinhua’s notice, however, goes beyond technical opinions. Jinhua intends to elicit testimony from Dr. Yang about whether the security measures victim-company Micron Technology, Inc. (“Micron”) took to protect its trade secrets were reasonable. *See* 18 U.S.C. § 1839(3)(A) (for information to be a trade secret, the owner must take “reasonable measures” to keep the information secret). But Dr. Yang lacks both the expertise and the methodology to opine on the reasonableness of Micron’s security measures. He has no specific expertise in the field of information security. He did not conduct any surveys or review any relevant literature about information-security practices. He did not interview a single Micron witness or make any attempt to determine what measures Micron uses to protect its trade secrets. Instead, he improperly focused on a measure Jinhua’s lawyers told him Micron did not use—disabling all access to USB storage—to conclude that Micron did not use reasonable measures to protect its information. Dr. Yang even goes so far to opine on Micron’s intent. According to his disclosure, Dr. Yang intends to testify that Micron did not mark several documents as “confidential” or “secret,” because it did not *consider* the documents confidential. Such opinions are the type of junk science and expert *ipse dixit* that should be excluded under *Daubert*.

RELEVANT BACKGROUND

To prove that information is a “trade secret,” the United States must prove that Micron has taken “reasonable measures to keep such information secret.” 18 U.S.C. § 1839(3)(A). To prove that element, the United States intends to offer the testimony of witnesses from Micron with knowledge of the physical, electronic, network, legal, policy, and employment measures that Micron used to protect its proprietary information, including its trade secrets.

On September 20, 2021, Jinhua provided notice under Federal Rule of Criminal Procedure

1 16(b)(1)(C) of its intent to offer the testimony of Professor Woodward Yang. *See* Yang Disclosure (Ex.
2 A). Yang has degrees in electrical engineering, is currently an engineering professor at Harvard, and has
3 spent his career working on research and development (“R&D”) in various subfields of electrical
4 engineering. *See* Yang CV (Ex B). Yang does not appear to have any formal training or professional
5 experience in the field of information security or cybersecurity. *See id.*

6 The Yang disclosure is primarily directed at noticing technical testimony intended to rebut the
7 testimony of the United States’ technical expert on DRAM process technology, Dr. Thomas Dyer. *See*
8 *generally* Ex. A. Jinhua also provided notice, however, of its intent for Dr. Yang to offer the opinion
9 that “Micron Does Not Appear to Have Taken Reasonable Measures to Keep The Information Contains
10 in [Alleged Trade Secrets 1-8] Secret in All Instances.” *Id.* at 12. According to Jinhua’s notice, Dr.
11 Yang will testify based on his review of documents that “the trade secret documents at issue . . . were
12 essentially training documents that were widely shared with mid-level plant employees in Micron’s
13 fabrication plants” and that “several of the alleged trade secret documents are not marked ‘Confidential’
14 or ‘Secret.’” *Id.* at 13. Based on that, Dr. Yang intends to opine that “Micron did not consider these
15 documents to be ‘confidential’ or ‘secret,’ and did not take reasonable measures to preserve these
16 documents’ secrecy.” *Id.*

17 Furthermore, Dr. Yang intends to testify that Micron did not use reasonable measures to protect
18 its trade secrets because he was informed by Jinhua’s counsel that Micron “may have allowed” its
19 employees to save information on USB devices so that they could work remotely, at home. *Id.*
20 According to Dr. Yang’s disclosure, that is unreasonable because another DRAM company did not
21 permit his graduate students to “take or download sensitive DRAM information or even allow them to
22 work remotely” and it is “common sense in the industry” to forbid the use of USB devices. *Id.*

23 The United States now moves pursuant to Federal Rule of Evidence 702 and the Supreme
24 Court’s opinion in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), to exclude the
25 testimony of Dr. Yang on the topics of: (1) the measures Micron took to protect the alleged trade secrets
26 in this case, including whether those measures were reasonable; (2) whether Micron considered the
27 alleged trade secrets trade secrets; and (3) how “companies interested in preserving highly confidential
28

and valuable trade secrets would generally” distribute those documents among different types of employees.

ARGUMENT

I. The Court Should Exclude Dr. Yang’s Proposed Testimony on Micron’s Reasonable Measures Because He Lacks Qualifications in the Field of Information Security

Pursuant to Federal Rule of Evidence 702 and the Supreme Court’s opinion in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), the Court acts as a gatekeeper to screen out unreliable testimony from purported experts. Testimony from a purported expert “is reliable if the knowledge underlying it has a reliable basis in the knowledge and experience of the relevant discipline.” *United States v. Sandoval-Mendoza*, 472 F.3d 645, 654 (9th Cir. 2006) (internal quotation marks and citations omitted).

Dr. Yang lacks the qualifications to offer opinions about Micron’s information security practices. *See Pecover v. Elec. Arts Inc.*, 2010 WL 8742757, at *5 (N.D. Cal. Dec 21, 2010) (Walker, J.) (“As a threshold matter, a proposed witness must qualify as an expert ‘by knowledge skill, experience, training, or education.’” (citing Fed. R. Evid 702)). He is an electrical engineer by training. His *curriculum vitae* does not indicate that he has any special expertise in the field of information security. *See* Ex. B. He does not have any experience advising companies—let alone large global semiconductor manufacturers—on information security. He does not appear to have any special knowledge of industry standards for information security—or if such standards even exist. And according to his *curriculum vitae*, he has been an academic since 2008, not someone dealing with information security in corporations. *See* Ex. B; *Pecover*, 2010 WL 8742757, at *5 (excluding testimony of expert video-game retail expert who was not qualified as an expert in economics or statistics); *Sloan Valve Co. v. Zurn Indus., Inc.*, 2013 WL 6068790, at *7 (N.D. Ill. Nov. 18, 2013) (excluding testimony of PhD in mechanical engineering who did not have professional experience in the field of plumbing or flush valves.”).

In short, Dr. Yang is a purported DRAM expert, not an information security expert.

II. The Court Should Exclude Dr. Yang's Proposed Testimony on Micron's Reasonable Measures Because He Has Not Applied a Reliable Methodology or Have a Basis of Knowledge

Dr. Yang's opinions about reasonable measures are not based on any cogent methodology and are inconsistent with the law. Dr. Yang concludes Micron did not use reasonable measures both because (1) it did not mark every trade secret as "confidential" or "secret" and (2) Jinhua's lawyer's told him Micron allowed employees to use USB devices to store information so they could work at home. Courts, however, assess the reasonableness of measures a company did take to protect trade secrets, not the measures it did not take. *See, e.g., See United States v. Chung*, 659 F.3d 815, 827 (9th Cir. 2011) (finding reasonable measures even though "none of the documents was kept under lock and key"); *Hertz v. Luzenac Grp.*, 576 F.3d 1103, 1113 (10th Cir. 2009) ("Just because there is something else" a trade secret owner could have done "does not mean that their efforts were unreasonable under the circumstances."); *United States v. Sing*, No. CR 14-212(A), 2016 WL 54906, at *1 (C.D. Cal. Jan. 4, 2016) ("The owner of a trade secret need only take measures that are reasonable under the circumstances; they do not need to take all conceivable measures."); *United States v. Hanjuan Jin*, 833 F. Supp. 2d 977, 1009 (N.D. Ill. 2012) (gaps in Motorola's security program, did "not mean that the measures it did take were not reasonable."); *see also* H.R. Rep. No. 24 104-788, at 7 (1996), reprinted in 1996 U.S.C.C.A.N. 4021, 4026 ("[A]n owner of this type of information need only take 'reasonable' measures to protect this information. . . . [I]t is not the Committee's intent that the owner be required to have taken every conceivable step to protect the property from misappropriation."). Accordingly—and contrary to Dr. Yang's opinion—there is no *per se* rule that trade-secret owners must brand trade secrets as confidential. *See, e.g., Chung*, 659 F.3d at 827 (four documents were trade secrets considering totality of protective measures, even though only two of four were "marked as proprietary"). Nor is there a *per se* rule that they must now allow trade secrets to be placed on USB drives. *See, e.g., Hanjuan Jin*, 833 F. Supp. at 1009 (Motorola took reasonable measures even though it did not disable USB ports).

Dr. Yang has no apparent knowledge of Micron's overall information-security program. He has not interviewed a single Micron employee with knowledge of that program. He does not reference

documents that describe that program. He makes no mention of the physical, electronic, network, legal, and employment-related measures Micron uses to protect its information. He should, therefore, be precluded from offering any testimony about the reasonableness of Micron's security measures. *See also Estate of Struller v. United States*, 811 F.3d 890, 895-96 (7th Cir. 2016) (affirming exclusion of testimony from expert who lacked relevant experience and who did not consider relevant data).

III. The Court Should Exclude Dr. Yang's Proposed Testimony on Micron's Reasonable Measures Because He Speculates as to the Micron's Intent

Dr. Yang's opinion regarding reasonable measures is flawed for other reasons. Based on the lack of a "confidential" stamp on "several" documents, Dr. Yang opines that "Micron did not consider these documents to be 'confidential' or 'secret.'" Ex. A at 13. That is unbridled speculation. "Rule 702 demands that expert testimony relate to scientific, technical or other specialized knowledge, which does not include unsubstantiated speculation and subjective beliefs." *Diviero v. Uniroyal Goodrich Tire Co.*, 114 F.3d 851, 853 (9th Cir. 1997). Dr. Yang has no basis to opine on what Micron "consider[ed]" confidential. Ex. A at 13. He has never been a Micron employee, he did not interview any Micron employees, and otherwise has no knowledge of whether Micron only considers documents confidential or secret if they are marked as such (it does not). The Court should forbid Jinhua from eliciting any testimony from Dr. Yang about what Micron thought or considered about its proprietary information. *Cf. Fed. R. Evid. 704(b)* (expert witness must not state an opinion about a defendant's mental state).

IV. The Court Should Exclude Dr. Yang's Proposed Testimony on Reasonable Measures in the Industry Generally Because He Lacks Qualifications in the Field of Information Security and He Has Not Applied a Reliable Methodology

For the same reasons, the Court should preclude Dr. Yang from testifying about how "companies interested in preserving . . . trade secrets would generally" distribute those documents among employees. Ex. A at 10. Dr. Yang intends to testify that companies would "generally" not distribute their trade secrets to "equipment operators, technicians and junior engineers, as Micron appeared to do." *Id.* Again, Dr. Yang's *ipse dixit* about what companies "generally" do is not backed by any reliable methodology, such as a survey of DRAM or other semiconductor companies. Nor did he review any relevant literature about information-security practices. And his speculation about whom Micron "appeared" to distribute some of the alleged trade secrets to is not based any information about Micron's

practices in that regard. Instead, Dr. Yang bases his conclusion on his further speculation that the documents “appear to be general training documents meant for training equipment operators, technicians, and junior engineers.” *Id.*

Dr. Yang’s opinion about the reasonableness of permitting USB drives is advocacy disguised as expertise. Dr. Yang’s basis for concluding that USB access is *per se* unreasonable is based on inapt anecdote: a company he worked on research with did not allow his graduate students to download sensitive DRAM information or work remotely. Ex. A at 13. Such an anecdotal account is not a methodology that can survive *Daubert* review. *See Berk v. Vincent’s Hosp. & Med. Center*, 380 F. Supp. 2d 334, 354 (S.D.N.Y. 2005) (“An anecdotal account of one expert’s experience, however extensive or impressive the numbers it encompasses, does not by itself equate to a methodology, let alone one generally accepted by the relevant professional community.”).

Aside from his anecdote, Dr. Yang intends to testify that it is “common sense in the industry” to prohibit the use of USB devices. Dr. Yang, however, is not an expert in the field of information-security. He therefore has no basis to opine on what is “common sense” in the field. Nor does he have any specific knowledge or expertise on the cost-benefit analysis of USB access for employees of a large corporation, let alone as specific to Micron in the 2015-2016 timeframe when the defendants stole Micron’s trade secrets. *See Rockwell Graphic Sys., Inc. v. DEV Indus., Inc.*, 925 F.2d 174, 179 (7th Cir. 1991) (Posner, J.) (determining reasonable measures “depends on a balancing of costs and benefits that will vary from case to case and so require estimation and measurement by persons knowledgeable in the particular field of endeavor involved”).

In sum, Dr. Yang is a purported DRAM expert, not an information security expert, and his testimony should be limited to his area of purported expertise.

CONCLUSION

For the reasons set forth above, the United States respectfully requests that the Court grant the United States’ Motion *in Limine* and issue an order precluding Dr. Yang from testifying about: (1) the measures Micron took to protect the alleged trade secrets in this case, including whether those measures

1 were reasonable; *see* Ex. A at 12-13; (2) whether Micron considered the alleged trade secrets to be trade
2 secrets; *see id.*; and (3) how “companies interested in preserving highly confidential and valuable trade
3 secrets would generally” distribute those documents among different types of employees. *See* Ex. A at
4 10.

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Respectfully Submitted,

7 STEPHANIE M. HINDS
8 Acting United States Attorney

9 /s/ Nicholas O. Hunter
10 LAURA VARTAIN HORN
11 NICHOLAS WALSH
12 Assistant United States Attorneys

13 NICHOLAS O. HUNTER
14 STEPHEN MARZEN
15 Trial Attorneys, National Security Division
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